

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

Claim 1 (**Currently Amended**): A method for detecting a state of a disc drive, comprising:

inputting a cable select signal; and
~~gating the cable select signal to determine the state of the disc drive when a jumper is set to indicate that the disc drive is in a cable select state or when the jumper is missing~~
setting a jumper across one of a first set of pins for indicating that the disc drive is in a master state, a second set of pins for indicating that the disc drive is in a slave state, or a third set of pins for indicating that the disc drive is in a cable select state; and
using at least one voltage from at least one of the first and second sets of pins for controlling at least one gate to couple the cable select signal to an output for indicating the state of the disc drive when the jumper is not set across any of the first, second, and third sets of pins.

Claim 2 (**Currently Amended**): The method of claim 1, wherein the ~~jumper that is not missing is set to indicate that the disc drive is in a master state, a slave state, or the cable select state~~ at least one gate includes a first buffer controlled by a first voltage at one of the first set of pins, and includes a second buffer controlled by a second voltage at one of the second set of pins, with the first and second buffers coupled in series between the output and a pin that has the cable select signal applied thereon.

Claim 3 (**Currently Amended**): The method of claim [[2]] 1, further comprising:
~~preventing the cable select signal from determining the state of the disc drive when the jumper is set to indicate that the disc drive is in the master state or the slave state~~

using at least one voltage from at least one of the first and second sets of pins for controlling said at least one gate to uncouple the cable select signal from the output when the jumper is set across any of the first and second sets of pins.

Claim 4 (**Currently Amended**): The method of claim ~~[[3]]~~ 2, ~~wherein the step of preventing includes~~ further comprising:

turning off at least one ~~buffer~~ of the first and second buffers for uncoupling the cable select signal from ~~[[an]]~~ the output that indicates the state of the disc drive when the jumper is set across any of the first and second sets of pins.

Claim 5 (**Currently Amended**): The method of claim ~~[[3]]~~ 1, further comprising:

outputting a first logic level for indicating that the disc drive is in the master state when the jumper is set ~~to indicate that the disc drive is in the master state~~ across the first set of pins; and

outputting a second logic level for indicating that the disc drive is in the slave state when the jumper is set ~~to indicate that the disc drive is in the slave state~~ across the second set of pins.

Claim 6 (**Currently Amended**): The method of claim 5, further comprising:

turning on a first buffer comprising the at least one gate that outputs the first logic level when the jumper is set ~~to indicate that the disc drive is in the master state~~ across the first set of pins; and

turning on a second buffer comprising the at least one gate for causing a logic mismatching gate to output the second logic level when the jumper is set ~~to indicate that the disc drive is in the slave state~~ across the second set of pins.

Claim 7 (**Currently Amended**): ~~The method of claim 1, wherein the step of gating includes:~~ A method for detecting a state of a disc drive, comprising:

inputting a cable select signal;

gating the cable select signal to determine the state of the disc drive when a jumper is set to indicate that the disc drive is in a cable select state or when the jumper is missing, the step of gating including the step of:

turning on at least one buffer that couples the cable select signal to a logic mismatching gate having an output that indicates the state of the disc drive.

Claim 8 (**Currently Amended**): A system for detecting a state of a disc drive, comprising:

an input node for inputting a cable select signal; ~~and~~

a first set of pins, a second set of pins, and a third set of pins, wherein a jumper is set across one of the first set of pins for indicating that the disc drive is in a master state, the second set of pins for indicating that the disc drive is in a slave state, or the third set of pins for indicating that the disc drive is in a cable select state; and

at least one gate that is controlled by at least one voltage from at least one of the first and second sets of pins for gating coupling the cable select signal to an output for indicating determine the state of the disc drive when [[a]] ~~the jumper is set to indicate that the disc drive is in a cable select state or when the jumper is missing~~ is not set across any of the first, second, and third sets of pins.

Claim 9 (**Currently Amended**): The system of claim 8, wherein the ~~jumper that is not missing is set to indicate that the disc drive is in a master state, a slave state, or the cable select state~~ at least one gate includes a first buffer controlled by a first voltage at one of the first set of pins, and includes a second buffer controlled by a second voltage at one of the second set of pins, with the first and second buffers coupled in series between the output and a pin that has the cable select signal applied thereon.

Claim 10 (**Currently Amended**): The system of claim ~~[[9]]~~ 8, wherein ~~the at least one gate prevents the cable select signal from determining the state of the disc drive when the jumper is set to indicate that the disc drive is in the master state or the slave state~~ at least one voltage

from at least one of the first and second sets of pins controls said at least one gate to uncouple the cable select signal from the output when the jumper is set across any of the first and second sets of pins.

Claim 11 (**Currently Amended**): The system of claim ~~[[10]]~~ 9, wherein ~~the at least one gate includes: at least one buffer that is turned off for uncoupling the cable select signal from an output that indicates the state of the disc drive, when the jumper is set to indicate that the disc drive is in the master state or the slave state~~ at least one of the first and second buffers is turned off for uncoupling the cable select signal from the output when the jumper is set across any of the first and second sets of pins.

Claim 12 (**Currently Amended**): The system of claim ~~[[10]]~~ 8, further comprising:
a master detection circuit that outputs a first logic level for indicating that the disc drive is in the master state when the jumper is set ~~to indicate that the disc drive is in the master state~~ across the first set of pins; and
a slave detection circuit that outputs a second logic level for indicating that the disc drive is in the slave state when the jumper is set ~~to indicate that the disc drive is in the slave state~~ across the second set of pins.

Claim 13 (**Currently Amended**): The system of claim 12, further comprising:
a first buffer that is turned on within the master detection circuit for outputting the first logic level when the jumper is set ~~to indicate that the disc drive is in the master state~~ across the first set of pins; and

a second buffer that is turned on within the slave detection circuit for causing a logic mismatching gate to output the second logic level when the jumper is set ~~to indicate that the disc drive is in the slave state~~ across the second set of pins.

Claim 14 (**Currently Amended**): ~~The system of claim 8, further comprising:~~

A system for detecting a state of a disc drive, comprising:

an input node for inputting a cable select signal;

at least one gate for gating the cable select signal to determine the state of the disc drive when a jumper is set to indicate that the disc drive is in a cable select state or when the jumper is missing; and

a cable select detection circuit having at least one buffer that is turned on to couple the cable select signal to a logic mismatching gate having an output that indicates the state of the disc drive, when the jumper is set to indicate that the disc drive is in the cable select state or when the jumper is missing.

Claims 15-18 (**Canceled**).

Claim 19 (**New**): The method of claim 1, further comprising:

using the at least one voltage from the at least one of the first and second sets of pins for controlling the at least one gate to couple the cable select signal to the output for indicating the state of the disc drive when the jumper is set across the third set of pins.

Claim 20 (**New**): The method of claim 2, further comprising:

turning on the first and second buffers using voltages from the first and second sets of pins as control signals to the first and second buffers when the jumper is set across the third set of pins.

Claim 21 (**New**): The system of claim 8, wherein the at least one gate is controlled by the at least one voltage from the at least one of the first and second sets of pins to couple the cable select signal to the output for indicating the state of the disc drive when the jumper is set across the third set of pins.

Claim 22 (**New**): The system of claim 9, wherein the first and second buffers are controlled to be turned on using voltages from the first and second sets of pins as control signals to the first and second buffers when the jumper is set across the third set of pins.